## REMARKS

Claims 1-8, 10-19, 21-26, 28, 29, 31-34, and 36-38 are currently pending in the subject application and are presently under consideration. Applicants note with appreciation the allowance of subject matter contained in claims 10-19, 21-26 and 28.

A clean version of all pending claims is found at pages 2-7. Claims 1, 10, 22, 29, and 34 have been amended herein. In particular, claims 10 and 22 have been amended to resolve minor informalities as cited by the Examiner. Claims 1, 29, and 34 have been amended by incorporating allowable subject matter from claims 10 and 22 therein. A marked-up version of claim amendments made herein is located at the end of this Reply.

Entry of the amendments is respectfully requested since they resolve rejections to place the application in condition for allowance and/or remove issues in the event of an appeal, and/or do not require further searching.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

### I. Rejection of Claims 10 and 22 Under 35 U.S.C. §112, second paragraph

Claims 10 and 22 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. For at least the following reasons, Applicant respectfully requests withdrawal of the rejection. Claims 10 and 22 have been amended to resolve the minor deficiencies respectively associated therewith. Thus, the rejection should be withdrawn.

### II. Rejection of Claims 1, 5, 29, 31-34, and 36-38 Under 35 U.S.C. § 103(a)

Claims 1, 5, 29, 31-34, and 36-38 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Blesener *et al.* (5,121,988) in view of Harwell *et al.* (5,942,672) and Liu (5,534,309). Applicant respectfully requests withdrawal of the rejection for at least the following reasons.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the

references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *See* MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *See In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Claims 1, 29 and 34, from which claims 2-8, 31-33, and 36-38 depend therefrom, respectively, have been amended by incorporating portions of allowable subject matter from claim 10, for example. In particular, claim 1 has been amended to further describe the system as comprising, among other recited features, a system for sending light from the light source across the chamber comprising at least one laser disposed in the chamber, the at least one laser adapted to send a ray of light across the chamber, and wherein the at least one laser includes a first laser located at a first height and a second laser located at a second height as well as a system for receiving the light comprising a first detector located at the first height and adapted to receive light from the first laser and a second detector at the second height adapted to receive light from the second laser. Claims 29 and 34 have been amended in a similar, consistent manner.

Blesener *et al.* in view of Harvell *et al.* and Liu, either alone or taken together, fail to teach or suggest the amended claims as recited above. More specifically, Blesener *et al.* does not disclose the at least one laser including the first and second lasers as described above in amended claims 1, 29, and 34. Harvell *et al.* and Liu fail to cure the aforementioned deficiencies of Blesener *et al.* Therefore, it would not have been obvious to one of ordinary skill in the art at the time the invention was made to combine and/or modify Blesener *et al.*, Harwell *et al.* and Liu as suggested by the Examiner to perform the present invention.

In view of the foregoing, the rejection should be withdrawn.

iii. **Rejection of Claims 2-4 and 6-8 Under 35 U.S.C. § 103(a)**

Claims 2-4 and 6-8 are rejected under 35 U.S.C. §103(a) as being unpatentable over Blesener *et al.*, Harwell *et al.* and Liu in view of Zinner (3,591,290). Applicant respectfully requests withdrawal of the rejection for at least the following reasons. Claims 2-4 and 6-8 depend from claim 1. Claim 1 has been amended as described above. Thus, the arguments set forth above with respect to claim 1 apply to claims 2-4 and 6-8 as well. Zinner fails to cure the aforementioned deficiencies of Blesener *et al.*, Harwell *et al.* and Liu. For example, Zinner does not teach or suggest an at least one laser including the first and second lasers as described above. Therefore, it would not have been obvious to one of ordinary skill in the art at the time the invention was made to combine and modify Blesener *et al.*, Harwell *et al.* and Liu in view of Zinner to perform the present invention. In view of the foregoing, the rejection should be withdrawn.

V. **Conclusion**

The present application is believed to be condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,

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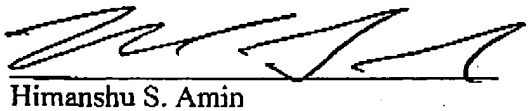

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## MARKED-UP VERSION OF AMENDED CLAIMS

Please amend claims 1, 10, 22, 29, and 34 as indicated below:

1. (Twice Amended) A system for monitoring particle count in a chamber, comprising:

a system for sending light from the light source across the chamber comprising at least one laser disposed in the chamber, the at least one laser adapted to send a ray of light across the chamber, and wherein the at least one laser includes a first laser located at a first height and a second laser located at a second height;

a system for receiving the light comprising a first detector located at the first height and adapted to receive light from the first laser and a second detector at the second height adapted to receive light from the second laser;

a system for determining particle count based upon interruptions in the light being received by the receiving system; and

an alarm system which sends an alarm if the contaminated particle count exceeds a predetermined threshold.

10. (Three Times Amended) A system for monitoring the contaminated particle count in a chamber, comprising:

at least one laser disposed in the chamber, the at least one laser adapted to send a ray of light across the chamber, and wherein the at least one laser includes a first laser located at a first height and a second laser located at a second height [and the at least one laser includes a first detector located at the first height and adapted to receive light from the first laser and a second detector at the second height adapted to receive light from the second laser];

at least one detector disposed in the chamber, the at least one detector comprising a first detector located at the first height and adapted to receive light from the first laser and a second detector at the second height adapted to receive light from the second laser, the at least one detector adapted to receive the ray of light and provide a signal corresponding to the intensity of the ray of light;

a measuring system operably coupled to the at least one detector, the measuring system adapted to receive the signal corresponding to the intensity of the ray of light and convert the signal to digital data; and

a processor operatively coupled to the measuring system, the processor adapted to receive the digital data from the measuring system and analyze the digital data wherein the difference of the intensity of the ray of light from the at least one laser to when it is received by at least one detector is proportional to the particle count in the chamber.

22. (Three Times Amended) A system for controlling the contaminated particle count in an aerosol found in a chamber during a photoresist coating and/or development process of a semiconductor, the system comprising:

at least one laser disposed in the chamber, the at least one laser adapted to send a ray of light across the chamber, and wherein the at least one laser includes a first laser located at a first height and a second laser located a second height [and the at least one laser includes a first detector located at the first height and adapted to receive light from the first laser and a second detector at the second height adapted to receive light from the second laser];

at least one detector comprising a first detector located at the first height and adapted to receive light from the first laser and a second detector located at the second height adapted to receive light from the second laser disposed in the chamber, the at least one detector adapted to receive the ray of light and provide a signal corresponding to the intensity of the ray of light;

a measuring system operably coupled to the at least one detector, the measuring system adapted to receive the signal corresponding to the intensity of the ray of light and convert the signal to digital data; and

a processor operatively coupled to the measuring system, the processor adapted to receive the digital data from the measuring system and analyze the digital data wherein the difference of the intensity of the ray of light from the at least one laser to when it is received by at least one detector is proportional to the particle count in the chamber;

an exhaust fan in communicative relationship with the chamber, the exhaust fan adapted to remove contaminated particles out of the chamber; and

a flow control valve controlling the exhausting level of the exhaust fan based on analyzed data received from the processor.

29. (Twice Amended) A system for monitoring the contaminated particle count in an aerosol found in a chamber during a photoresist coating and/or development process of a semiconductor, the system comprising:

means for transmitting a ray of light across the chamber, the means comprising at least one laser disposed in the chamber, the at least one laser adapted to send a ray of light across the chamber, and wherein the at least one laser includes a first laser located at a first height and a second laser located at a second height;

means for detecting the intensity of the ray of light and providing a signal corresponding intensity of the ray of light, the means comprising at least one detector comprising a first detector located at the first height and adapted to receive light from the first laser and a second detector located at the second height adapted to receive light from the second laser disposed in the chamber;

means for converting the signal to digital data;

means for determining the particle count during resist coating in the chamber from the digital data based on the change of intensity of the ray of light due to contaminated particles in the chamber; and

means for exhausting the contaminated particles from the chamber.

34. (Twice Amended) A method for monitoring the contaminated particle count in an aerosol found in a chamber during a photoresist coating and/or development process of a semiconductor, the method comprising the steps of:

transmitting a ray of light across the chamber using at least one laser disposed in the chamber, wherein the at least one laser includes a first laser located at a first height and a second laser located at a second height;

detecting the intensity of the ray of light and providing a signal corresponding to the intensity of the ray of light using at least one detector, the at least one detector comprising a first detector located at the first height and adapted to receive light from the first laser and a second detector located at the second height adapted to receive light from the second laser disposed in the chamber;

converting the signal to digital data;

determining the particle count in the chamber from the digital data based on the change of intensity of the ray of light due to contaminated particles in the chamber; and

exhausting the contaminated particles from the chamber when the particle count exceeds a predetermined level.